

IN THE CLAIMS

Claims 1, 36, 82-87, and 90-93 have been amended. Claims 1, 11, 36, 42, 43, 82-88, and 90-93 are pending in the instant application. The following is the status of the claims of the above-captioned application, as amended.

1. (Currently Amended) A method for determining the mode of action of an antimicrobial compound, comprising:

(a) detecting hybridization complexes formed by contacting at least one nucleic acid sample, obtained by culturing cells of a *Bacillus subtilis* in the presence of at least one sub-inhibitory amount of an antimicrobial compound having an unknown mode of action, with a plurality of nucleic acid sequences corresponding to genes of the *Bacillus subtilis* cells, wherein the plurality of nucleic acid sequences is contained on a substrate, wherein the presence, absence or change in the amount of the hybridization complexes detected, compared with hybridization complexes formed between the plurality of nucleic acid sequences and a second nucleic acid sample obtained from the *Bacillus subtilis* cells cultured in the absence or presence of a standard compound having a known mode of action, is indicative of the similarity ~~or dissimilarity~~ of the mode of actions of the antimicrobial compound and the standard compound; and

(b) assigning a mode of action for the antimicrobial compound based on the similarity ~~or dissimilarity~~ of values assigned to the hybridization complexes detected in (a) based on the relative amount of hybridization to a second set of hybridization values assigned to the hybridization complexes formed from the second nucleic acid sample.

2-10. (Cancelled).

11. (Original) The method of claim 1, wherein the antimicrobial compound is a member of the class of antimicrobial compounds that inhibit cell wall synthesis, interfere with the cell membrane, inhibit protein synthesis, inhibit topoisomerase activity, inhibit RNA synthesis, or is a competitive inhibitor.

12-26. (Cancelled)

27. (Cancelled).

28-33. (Cancelled)

34. (Cancelled).

35. (Cancelled)

36. (Currently Amended) The method of claim 1, further comprising:

(c) identifying from the plurality of nucleic acid sequences at least one sequence from the nucleic acid sample obtained from the *Bacillus subtilis* cells cultivated in the presence of the antimicrobial compound that has a detected expression level that is significantly different from the nucleic acid sample obtained from *Bacillus subtilis* cells cultivated in the absence of the antimicrobial compound, wherein the difference in the detected expression level is ~~at least~~ about 10% or greater.

37-41. (Cancelled)

42. (Previously Presented) The method of claim 36, further comprising:

(d) isolating a sequence identified in (c).

43. (Original) The method of claim 42, wherein the sequence is a marker of the antimicrobial compound.

44-79. (Cancelled).

80. (Cancelled).

81. (Cancelled).

82. (Previously Presented) The method of claim 1, wherein the plurality of sequences ~~correspond to less than~~ equals about 75% of the genome or less of the *Bacillus subtilis* cells.

83. (Currently Amended) The method of claim 1, wherein the plurality of sequences ~~correspond to less than~~ equals about 50% of the genome or less of the *Bacillus subtilis* cells.

84. (Currently Amended) The method of claim 1, wherein the plurality of sequences ~~correspond to less than~~ equals about 25% of the genome or less of the *Bacillus subtilis* cells.

85. (Currently Amended) The method of claim 1, wherein the plurality of sequences ~~correspond to less than~~ equals about 10% of the genome or less of the *Bacillus subtilis* cells.

86. (Currently Amended) The method of claim 1, wherein the plurality of sequences ~~correspond to less than~~ equals about 5% of the genome or less of the *Bacillus subtilis* cells.

87. (Currently Amended) The method of claim 1, wherein the plurality of sequences ~~correspond to less than~~ equals about 2% of the genome or less of the *Bacillus subtilis* cells.

88. (Previously Presented) The method of claim 1, wherein the substrate is a microarray, macroarray, Southern blot, zoo blot, slot blot, dot blot, or Northern blot.

89. (Cancelled).

90. (Currently Amended) The method of claim 36, wherein the difference in the detected expression level is ~~at least~~ about 20% or greater.

91. (Currently Amended) The method of claim 36, wherein the difference in the detected expression level is ~~at least~~ about 50% or greater.

92. (Currently Amended) The method of claim 36, wherein the difference in the detected expression level is ~~at least~~ about 75% or greater.

93. (Currently Amended) The method of claim 36, wherein the difference in the detected expression level is ~~at least~~ about 100% or greater.